

Serial No. 09/895,152

Reply to Office Action dated October 7, 2005

Docket No. MEMS-0160-US

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for forming a mask, which comprises:
 - providing a photosensitive material;
 - performing at least one pass to write a gray scale pattern onto the photosensitive material, wherein each pass is offset such that no two passes write along the same path; and
 - developing the photosensitive material.
2. (original) The method of claim 1, further comprising etching the photosensitive material.
3. (original) The method of claim 1, wherein the photosensitive material is a photoresist, an e-beam resist, a HEBS glass, an emulsion or a black resist.
4. (original) The method of claim 1, wherein there are about 2-8 passes.
5. (canceled)
6. (original) The method of claim 1, wherein the at least one pass is performed using a laser, uv, electron beam, infrared, visible or x-ray source.

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7. (original) The method of claim 1, wherein stitching error and exposure non-uniformity is reduced.

8. (previously presented) A method of lithographic processing for the formation of a microstructure, which comprises:

providing a substrate; applying a photosensitive material over the substrate;
performing at least one pass to write a gray scale pattern of a specific structure onto the photosensitive material, whereby stitching error and exposure non-uniformity is reduced;

melting at least a portion of the photosensitive material, whereby general roughness error is reduced;

developing the photosensitive material; and
removing remaining photosensitive material.

9. (original) The method of claim 8, further comprising: etching the photosensitive material to transfer the microstructure onto the substrate.

10. (original) The method of claim 8, wherein the at least one pass is performed using a mask.

11. (original) The method of claim 10, wherein the mask has been formed using a